2: Stefansson--67 (1908-1912) 1914 Copper Eskimo
116, 412, 415

"On the table in front of the lamp [AW: in the snow house] will usually be found some platters made of wood for holding meat and dippers of musk-ox horn from which the blood soup is drunk. There is also a woman's knife, the rod of antler which she uses in place of a fork to turn over the meat when it is boiling and to fish it out with when it is done, the blubber pounder of musk-ox horn to crush the frozen seal blubber before it is put into the lamp, and the short flat-tipped stick that is used for trimming the lamp. There is also kept convenient a little pencil-like stick the end of which is charred and stuck in grease. This can be made at any time to form a torch if anyone wants to look in a dark corner of the house or under the bed for something. By the door is a flat stick like a ruler that is used for beating the snow out of the clothes when anyone comes in from a blizzard."

2: Stefansson--233
415, 117

(1908-12) 1914

Copper Eskimo

"Lamps. The largest lamp I have seen must be forty inches long and weigh fifty pounds. The largest pot is about thirty inches by eight and eight inches deep, flat bottom."

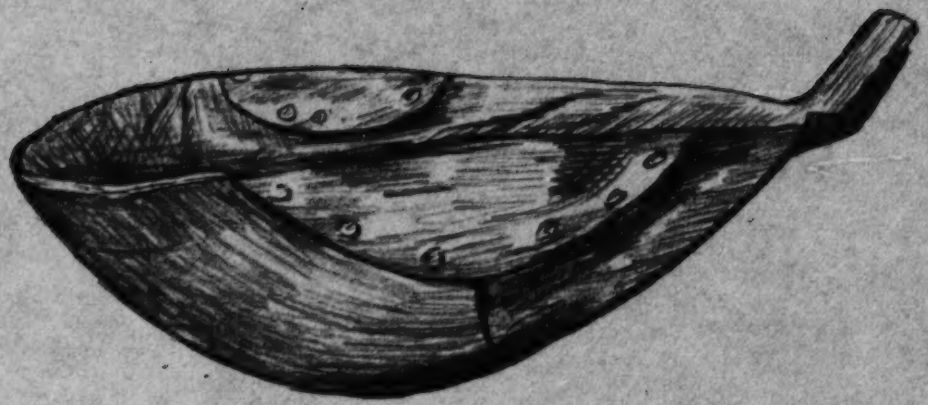


Plate XI--DIPPER OF MUSKOX-HORN SHOWING REPAIR WITH COPPER RIVETS

8: Cadzow--21-22 (1919) 1920 Copper Eskimo
116, 415, 356

"Repairing with Copper.--Native copper is invaluable to the Eskimo of Coronation gulf for repairing broken household utensils, some of which are very fragile. Steatite [22] cooking vessels are repaired, when broken, by driving copper staples through the soft stone on each side of the fracture, and clinched on the inside.

A muskox-horn dipper is repaired when worn or broken by placing a piece of horn against the side to be mended and fastening it in place with copper rivets, as shown in pl. xi."

12: Collinson--286 [2] (1851-53) 1889 Copper Eskimo
116, 415, 411, 304, 152

"Their arms, lamps, and other utensils correspond with Sir E. Parry's description; during the winter, the bow with its cover and quiver is left at home, and a short spear tipped with bone carried in lieu. Among their caches in the inner harbour were two or three triangular pieces of wood fitted with slings for the arm, and apparently designed to act as a kind of shield; one of the principal men among them was scarred severely across one side of his face, but I could not make out whether it was done in war or not; they at first with us carried their knives with the blade up their sleeves, and the haft in the hand, in readiness for immediate use; but notwithstanding the dread of our firearms may have kept them quiet, I am inclined to think they are an inoffensive race."

17: Merwin--168 (No date) 1915 Copper Eskimo
116, 415

"The lamps are similar to those used by other Arctic people. In size much variation is found, the lamps used on hunting trips are small, being six or eight inches long, while those used in the household may be as much as three feet long. The stone pots also show a wide range in size required, some holding as much four or five gallons. As several months are required to make a large pot, it is carefully repaired with copper strips if it becomes broken. Many of the pots in the collection show signs of repairs. A blubber beater made of musk ox horn is used by the natives to pound blubber so that it may be more readily used as fuel.

Large cups and ladles are likewise made of horn to use in serving the soup which forms part of every cooked meal. These cups in many cases have been broken and repaired by riveting a piece of horn over the broken place. A cup similar to the horn cups but cut out of stone is one of the new features of the collection."

19: Cadzow--28 (No date) 1924 Copper Eskimo
116, 415

"Two fine cooking vessels of steatite are also represented in this collection, the larger measuring 37 1/2 inches long, 6 3/4 inches wide, and 5 inches deep--an unusual size for Coronation gulf, although vessels have been reported from this region as large as 40 inches in length. The smaller vessel is 26 1/2 inches long; 7 inches deep, and 9 1/2 inches wide in the center, tapering to 8 inches at each end. This type of vessel is rare among the Eskimo of Coronation gulf. Both vessels are perforated at the corners for suspension, and in use are swung on rods that may be shifted over or away from the flame."

"Their domestic utensils consist of stone kettles and wooden troughs; dishes, scoops, and spoons made of the horns of the musk ox. Some of their kettles are capable of containing five or six gallons, and are hollowed out in the form of an oblong square, with no other instrument than a harder stone to work with."

28: Jenness E-5 (1914-1916) 1946
ND8 Copper Eskimo ND8

[P. 1]

MATERIAL CULTURE OF THE COPPER ESKIMO

INTRODUCTION

In 1914, when the Canadian Arctic Expedition established its headquarters at Bernard Harbour in Dolphin and Union Strait, on the western fringe of Copper Eskimo territory, the natives preserved their old culture, virtually unimpaired, despite contact with several explorers in the middle of the nineteenth century, and with others during the early years of the twentieth. The only visible change caused by these contacts was the introduction of a considerable quantity of iron, which the Eskimo hammered cold, as they hammered their native copper, and had already substituted for copper in knives, adzes, harpoon-heads, and needles. From lack of ammunition the only men who possessed rifles, five in number, had fallen back on the bow and arrow, which was still the universal weapon of the chase. Of the arrows not tipped with bone about two-thirds bore tips of hammered copper and only one-third tips of iron; the ice chisel and other tools retained their copper blades and points; and the soapstone pot for cooking meat held undisputed sway in every household. All clothing was of skin or fur, mainly from the caribou and the seal; and in cut and adornment it followed without change the styles set by earlier generations. The blubber of the seal, burned in a soapstone lamp, provided the only artificial light, and throughout the winter months all the energies of the Eskimo were concentrated on the pursuit of seals at their breathing holes in the sea ice.

Ten years later the situation had undergone a profound change. Native copper had become practically valueless and served for rivets only. Bows and arrows had disappeared, because every native was now armed with a high-powered rifle. Other weapons and tools had steel or iron blades, metal cooking pots had ousted the soapstone vessels, and primus lamps and kerosene lanterns were spreading from home to home. Fur clothing was tending to follow western Eskimo patterns, and to be overlaid with bead-work, or with imported garments of cotton or wool. Dissatisfied with the old-fashioned snow-hut and skin-covered kayak, one native had even erected a plank cabin heated by an iron stove, and purchased a motor-boat to transport his household goods along the coast during the brief summer months. The tentacles of the fur trade had firmly gripped the region, and the trapping of foxes, animals of no economic importance in earlier times, now rivalled in importance the hunting of seals and caribou.

Fortunately, before this revolution occurred, the Canadian Arctic Expedition had brought out a large collection of Copper Eskimo specimens, nearly all of which are now stored in the National Museum at Ottawa. These specimens, and

Two incidents that came directly under my notice in the summer of 1915 were fairly typical. A native with whom I was travelling in southwest Victoria Island discovered on the beach a long, nail-studded plank that had presumably fallen overboard from some vessel. He carried it several miles inland to our camp, and there spent half a day splitting it into poles for fish-spear handles, two of which he sold to a kinsman. A few days later another native found a second plank, which he proposed to convert into a sled-runner, and with this purpose in view trimmed it slightly with his hunting knife. After consulting his companions, however, he decided that a new sled-runner was not needed, so he turned the plank over to his stepfather to fashion into tent-poles. In each case the native split the plank with a crude antler wedge driven home by a boulder.

The uses of wood were naturally manifold. From it were made the sled, the tent-poles, the frame of the kayak, the snow shovel, the table, food trays, and other articles too numerous to mention. Odd chips of wood sometimes served as fuel during the summer months, although the Eskimo preferred heather or willow twigs. Willow twigs had a special use; sewn together in a long strip they provided a mattress to protect the bedskins from the snow.

STONE

Stone (apart from native copper) played an astonishingly small rôle in the economy of the Copper Eskimo. Their winter home was invariably the snow-hut, although their predecessors in the region had dwelt in huts of snow or wood, whose ruins could still be traced in numerous places along the coast. Loose stone boulders held down the edges of the Copper Eskimo tents; pillars of stone (in many cases flat slabs of dolomite easily piled one on top of another) supported kayaks, sleds, and other goods that were temporarily abandoned during the summer months; and heaped-up boulders protected caches of meat or clothes from the ravages of foxes, wolves, and birds; but any real construction in stone was conspicuously lacking. There were no stone knives or adzes, no arrow heads tipped with stone, no stone sinkers for fishing lines or nets, and no stone scrapers for use on wood or hides, although implements of all these types had been used by the earlier inhabitants and were sometimes gathered as curiosities by the Copper Eskimo themselves. There were stone hammers and whetstones, it is true, but these were merely unshaped pebbles picked up when the need arose and afterwards discarded. In short, stone provided the material for two objects only, the lamp and the cooking pot; and the stone cooking pot was discarded soon after our visit in favour of iron vessels brought in from the outside.

Figure 1. Lamp of native copper. IV.D.1661. 1/1.

These two vessels, the lamp and the cooking pot, were invariably made from soapstone (talc chlorite schist), originally with copper-bladed adzes, but in our time with adzes of iron. Freshly quarried soapstone readily scratches with the

fingernail, so that the labour of manufacturing even a large vessel was comparatively slight, never requiring more than a few days. We saw no pots made of any other material, but from Prince Albert Sound we obtained two lamps, one fashioned from a red sandstone, the other from an igneous rock, that could hardly have been hollowed out with adzes in the ordinary way, but must have been shaped by some pecking and grinding process. Their owners knew nothing about their manufacture, and there is good reason to believe that they were not made by the Copper Eskimo, but came in from Hudson Bay.[1]

As stated in the introduction, the natives considered their amygdaloidal copper,[2] which took the place of stone, bone, or ivory in so many of their implements, as merely a peculiar stone that they could work into shape, cold, by hammering with boulders and pebbles (Figure 1). Whether they were able to drill copper before they obtained iron is uncertain; if so, they must have used stone- or copper-pointed drills. In our time they still retained one or two of these copper-pointed drills, but used them, so far as we observed, only on bone, antler, and wood.

Figure 2. Lump of galena, used for marking skins. IV.D.200. 1/1.

The only important mineral besides copper was iron pyrites, which the Eskimo gathered mainly in the beds of two streams, Kugaluk River in the southwest of Victoria Island and a creek a few miles east of Coppermine River. There were other sources, however, that I failed to record. This mineral served the natives instead of flint and steel for striking fire. They possessed also a few fragments of galena (Figure 2) and litharge, which they used for marking skin and wood; the galena came mostly from Galena Point in Bathurst Inlet, but the source, or sources, of the litharge is not known.

BONE, ANTLER, HORN, IVORY

The caribou and the musk-ox supplied nearly all the bone that the Copper Eskimo required, although for shoeing the runners of their sleds they used rib bones from occasional whales that drifted up on their shores. There was hardly a bone in the two land animals that could not be turned to some purpose. Leg bones were in special demand for skin stretchers, for needle-cases, and for sheathing the wooden ends of harpoon shafts; another type of skin stretcher was fashioned from a caribou or musk-ox shoulder blade. The ribs served for handles of various kinds, for small toggles, pins, and bows for the drilling set. Other toggles were made from the breast or pelvic bones, and the astragalus provided a ready made mouthpiece for the drill.

The caribou alone provided antler, which was just as useful as bone, and interchangeable with that material for most purposes. On the other hand, ivory, which Eskimo elsewhere often substituted for bone and antler, was extremely rare, because neither the narwhal nor the walrus frequents the waters adjacent to the Copper Eskimo territory; consequently, the few ivory objects we saw among the natives almost certainly reached them by trade from the east or the west. Sheep likewise were absent, so that all the horn in use came from the musk-ox. This horn sometimes took the place of bone or antler, but it was especially prised for the manufacture of ladles, scoops, drinking horns, toggles for the sled, and hammers for pounding blubber.

Originally the Copper Eskimo used only four tools, all with copper blades, for shaping bone, antler, and horn, viz., the adze, the whittling knife, the grooving

[1] See p. 68.
[2] For the sources of this copper see Reports of the Canadian Arctic Expedition, vol. XII, pt. A, p. 32; vol. XI, pt. A, p. 38 et seq.

321 412 tool, and the drill. In our time nearly all these tools had steel or iron blades, and a fifth had been added, a small saw with a blade of hoop iron. Saws were not numerous, however, and it was still a common sight to see a native scoring deep cuts in bone or antler with his grooving tool and then breaking out sections with his adze. The curved whittling knife gave the final shape, and rubbing, first with stone or sand and then with a strip of hide, the smoothness and polish. Musk-ox horn alone was susceptible of a different treatment; to make from it ladles and scoops, the natives split it longitudinally, steamed it over their cooking pots, then opened it out and bent it to shape by simple pressure and hammering.

237 There was current among the Copper Eskimo one other substance similar to the foregoing, baleen, but it was rather scarce, and in the eastern part of the territory almost unknown. Whether it came from stranded whales, or was brought in from the west, I did not discover. The natives used it, apparently 237 for fishing lines only, lines mainly for catching tomcod during the winter months 229 when the more usual lines of sinew tended to become brittle with encrusted ice. 283 I never saw them cut or split baleen, but doubtless they used the whittling knife for this purpose.

HIDES AND SINEW

237 [433] It is hard for the civilized inhabitant of a warmer country to realize the immense importance of skins in the domestic economy of the Copper Eskimo. They provide him with clothes and bedding throughout both winter and summer, bags in which to store his clothing, a tent for use nearly half the year when a snow-hut was either uncomfortable or impossible, a cover for his kayak, straps and lashings for his sled, harnesses and traces for the dogs, lines and lashings for harpoons and other weapons, packing lines, dog packs, water buckets, pokes for meat and blubber, and other articles for which Europeans utilize cloth, rope, or metal. It was, consequently, of the utmost importance to the native that he should know how to treat skins to the best advantage. Fortunately, the two animals on which he depended most for his food, the seal and the caribou, were precisely the ones whose hides were the most useful.

281 [225] *Seal Skins.* The Copper Eskimo had two methods of skinning a seal. They generally made a cut around the base of each flipper, another around the neck, and a third down the belly, after which they separated the skin from the blubber with a knife. As it was impossible to remove all the blubber in this way, the skin was then soaked in warm water. Holding one end in her mouth while the [462] other remained in the pot, the woman (for the work almost invariably fell on [412] the housewife) scraped it thoroughly with her curved knife. As soon as the weather was warm enough she set it out to dry, sometimes on top of the house, sometimes on the ground, sometimes pegged over and around a block of snow.

A sealskin thus dried was roughly oval in shape and still retained the hair [415] on the outside. If you folded in the ends, doubled it over and tied a line to [492] each end, you had the common Copper Eskimo fishing bag; if you laced each end across through the holes by which it was pegged out, you had a dog pack, broad and flat in the middle where it rested on the animal's back, and bag-shaped at each end for holding the meat or clothing. The hair was no 281 disadvantage in such skins; indeed, for raincoats and for spring foot-gear it 294 was indispensable, but as the skin was more supple without it, it was generally removed by resoaking in warm water and scraping with a knife. To soften the skin still more, and to change the outer surface from a dark colour to white, it was subjected to further scraping, and, after drying, rubbed between the hands and chewed between the teeth, when odd scraps that came away found lodging in the chewer's stomach. From these creamy white skins were made the sealskin

223 They skinned birds in exactly the same way as small animals, except that
237 they tore the skin of a small bird down the legs without cutting it, and, when
825 drawing the skin over the head, held the feet in the teeth instead of tying them
136 to a tent-pole or other convenient object. Loon skins made excellent whisks for beating off the mosquitoes. The bill of the largest species of loon, *Gavia stellata*, was frequently sewn to the top of the dancing cap; and the feet skins of swans, geese, and ducks converted into tinder bags. Every household had its stock of ptarmigan skins for use as dusters, and to wipe the hands and face after eating or handling blubber; one skin served the whole family and all its visitors until every feather was worn out. The Eskimo used other bird skins for the same purpose, especially sea-gull skins, the oily feathers being naturally more suitable for towels than ptarmigan feathers. The skins of fish were usually eaten. The Copper Eskimo, unlike others of their race, never made any real clothing from fish or bird skins, although sometimes they stuffed a few feathers or the skin of a loon inside their seal-skin shoes.

[301] [415] [515] [262] [294]

CHAPTER III

HOUSEHOLD FURNITURE

FIRE-MAKING

372 The Copper Eskimo were familiar with the method of making fire by means of the thong drill, but rarely practised it because it involved strenuous labour and suitable wood was rare. The handles of some of their whittling [142] knives and other tools had small holes to fit the top of the spindle, for a man pressing down with both hands could exert greater force than was obtainable with the usual drill mouthpiece. Figure 46 shows the hearth of an old fire-making apparatus; the specimen was discovered on the beach at Kater Point, close to Bathurst Inlet.

372 The ordinary method of making fire was by striking 312 together two pieces of iron pyrites, for which there were several sources around Coronation Gulf, the two best known being Kugaluk River, which flows down from the Colville Hills in southwest Victoria Island into the sea behind Cape Kendall, and a small river a few miles east of Coppermine River. The pyrites was occasionally covered with sealskin or caribou skin to protect the hand.

372 The spark was caught in willow catkins contained in a 239 small disk-shaped bag of sealskin closed with a circular lid of the same material (Figure 47). A little blowing soon 415 spread the glow over a large surface so that it could ignite a lamp-stick or a bunch of matted moss roots dipped in [824] blubber. To foment a flame, however, most Eskimo kept a little stock of dry grass, which, like the lamp-wick of eriophorum seed, they carried in small bags made from the lining around the heart of some animal (Figure 48), from the skin on a loon's foot (Figure 49), or from caribou or marmot fur.

Figure 46. Wooden hearth of fire drill. IV.D.339. 2/3.

LAMPS

354 Many writers have stressed the fundamental importance of the Eskimo blubber lamp, without which the natives could not have survived along the northern coast-line. [1078] Although in certain regions they have now adopted substitutes such as stearin candles, coal-oil lamps, wood stoves, and primus stoves, throughout large parts of the Arctic the blubber lamp still holds its own.

Porsild[1] states that "In Arctic regions proper, train-oil is the only fuel, and there the lamps are large; where other fuel [372] —heather, wood, peat or coal—is available, either the whole year round or only in the summer, the lamp used for burning blubber oil loses its importance as a heater, and is used

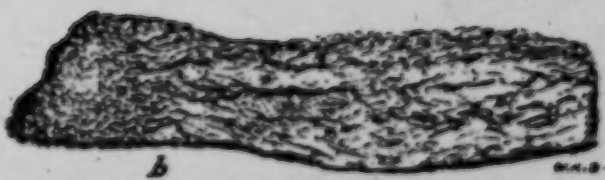
[113] [1] Porsild, Morten P.: The Material Culture of the Eskimo in West Greenland. Meddelelser om Grønland, vol. 52, p. 242.

354 solely for illuminating purposes. For this, small specimens may suffice. But a
[511] surplus of light and heat is inevitably connected with the Eskimo idea of luxury;
[171] therefore big lamps are also found in such regions. Conversely, small and rudely made lamps for burning blubber oil are found also in the regions of the Far North.

372
824
415
237

a

372
824
416



b

Figure 47. Fire-lighting apparatus; a: sealskin tinder-bag containing oriophorum seeds, IV.D.728, 1/1; b: moss-root torch, IV.D.327, 1/2.

354 The reason for this may either be lack of material, or these lamps may be
171 intended for some particular purpose—for use on journeys or for illuminating the entrance or corners inside the house."

Hough again, in his well-known memoir,[1] distinguishes three kinds of Eskimo lamps on the basis of their use, viz. the house lamp, the travelling or summer lamp, and the mortuary lamp, the latter frequently being models.

Figure 48. Bag for dry grass, made from the lining around an animal's heart. IV.D.226. 1/1.

Neither of these statements is quite correct when applied to the Copper Eskimo. They had lamps of every size, from 2 or 3 inches long up to 30 inches; and small vessels 8 or 12 inches long were as common as lamps of 20 inches. From June to September or October, when most of the snow had melted from the land and the families were scattered in search of fish and caribou, the natives generally cached their lamps with the sleds on the seashore or on the margins of lakes, and used for fuel dwarf willow, heather, *Dryas integrifolia*, and other plants, instead of blubber. Consequently, they had no special summer lamp. But because their ordinary lamp seldom functioned during the summer months we cannot say with Pornid that it had lost its importance as a heater. It still remained the indispensable prerequisite of existence during two-thirds of the year for heat as well as for light.

[1] Hough, Walter Ann. Rept. Smith. Inst., U.S. Nat. Mus., 1895, p. 998.

Lamps only 2 or 3 inches long were children's toys, often made by themselves while their parents were manufacturing larger vessels. The Copper Eskimo placed on the graves of females these miniature lamps, or else genuine vessels of small size, simply because they valued their larger lamps too highly to throw them away, and believed that the dead person could enlarge a miniature to suit its needs. Frequently, perhaps generally, they recovered useful lamps that had been deposited on the graves of relatives a few years earlier. Very rarely did they make a lamp, even a miniature one, for mortuary purposes only; and when they did, it was nearly always a wooden model, because soapstone was procurable only in one or two districts.

Figure 48. Bag for grass or cryophorum seeds, made from loon's foot. IV.D.224. 1/1.

Most of the cooking was done on lamps not less than 24 inches long. Lamps smaller than this, even down to 5 and 6 inches, served for short journeys, but were not intended primarily for that purpose any more than to be deposited on graves. Rather they were used to dry extra clothes, to give additional light for sewing or working, or to enable a little girl to play at housekeeping in a corner of the hut. Two small lamps laid side by side sometimes took the place of one large lamp for cooking. When these smaller specimens were made of soapstone the shapes were the same, and the workmanship as careful, as in the larger ones. Frequently, however, a family was content to use a water-worn pebble with a saucer-shaped depression, or a naturally hollow slab of limestone or dolomite.

If we exclude the makeshift lamps last mentioned there was really only one kind among the Copper Eskimo, the regular house lamp, of which the smaller specimens, when not mere toys, were generally used for light alone, the larger for both light and heat. Nearly all were made of talc chlorite schist, a soapstone that is soft, of even texture, easily worked with stone or copper tools, and not liable to crack and break under the low heat of the burning blubber.[1]

[1] In their native lands the Eskimo sometimes rested the lamp directly on two more blocks and kept them lighted for a considerable time without other effort than the gradual melting of the snow.

two or three stones supported the lamp; and on short winter journeys, when the lamp served only for light, it was simply placed on a block of snow. As already stated, it was seldom employed during the summer months.

Unlike nearly all Eskimo tribes the Copper Eskimo seldom or never used moss for the lamp-wick, but substituted the seeds of the cottongrass, *Eriophorum angustifolium*, or, more rarely, the catkins of the dwarf willow, either of which gave a more smokeless flame. *Eriophorum angustifolium* matures about the beginning of September, and it was at that season the women gathered the seeds into small bags made of loon skin, marmot skin, or other convenient material. They gathered a large supply, as in midwinter the wick needed daily renewing; and they deferred the separation of the seeds from the stalks until leisure moments in camp.

Lighting and Tending the Lamp. The Copper Eskimo lighted and tended their lamps in the same way as the Eskimo of Smith Sound[1] except that they did not chew the blubber and spit it into the lamp. The housewife took out of a sealskin poke two or three strips of blubber a foot or more long by several inches wide, and with a specially designed hammer of musk-ox horn (See Figure 63) pounded them on the table to break up the cells.[2] She then laid them in the well of the lamp, when a little oil began at once to accumulate on the bottom, unless the weather was extremely cold. In this oil she soaked her eriophorum seeds, and arranged them along the lip of the lamp in a continuous line so that their lower edges touched the bottom of the well (or at least dipped into the oil that shortly accumulated), and the upper edges projected about a quarter of an inch above the rim. To light the wick she pinched it up into little points 2 or 3 inches apart, which readily caught fire from the torch; and by patting up adjacent parts of the wick with her lamp-trimmer she quickly produced a continuous smokeless flame rising to a height of about three-quarters of an inch. As the heat melted the oil out of the strips of blubber, she removed them to the back shelf of the lamp until they drained; then, later, she threw them to the dogs. Sometimes, if the lamp already contained a certain quantity of oil, she placed fresh strips of pounded blubber on the same shelf instead of in the well, so that the oil would not accumulate too rapidly and drip over the outer edges of the lamp. The Copper Eskimo had no device for melting the blubber on a stick or shelf, such as was common in both the eastern and western Arctic.

Hough[3] says that lamp-trimming "only reached perfection in the old women of the tribe, who can prepare a lamp so that it will give a good, steady flame for several hours, while usually half an hour is the best that can be expected." This is not true of the Copper Eskimo. There, the women naturally have more experience than the men, and on the average are more skilful, but many a hunter can tend the wick just as successfully as his wife. A lamp is seldom allowed to smoke; one of the inmates, be it the man, his wife, or even one of the children, is sure to notice it and pat down the wick.

The same writer states in another passage[4] that "the lamp and the pot usually agree as to size, the rule being that the length of the pot shall be equal to the length of the wick edge." Among the Copper Eskimo, as in Smith Sound and, I believe, elsewhere, the sizes of the two vessels bear no direct relation to one another. For obvious reasons the wick edge of the lamp should be no shorter than the bottom of the pot; but it may be, and often is, much longer, for with her lamp-trimmer the housewife can readily adjust the flame to whatever length she desires.

[1] Cf. Stromby, H. P.: Contributions to the Ethnology and Anthropology of the Polar Eskimos: Meddelelser om Grønland, vol. XXXIV, p. [illegible].
[2] Polar bear fat was occasionally used instead of seal blubber, and probably fat of any kind in emergencies.
[3] Hough: op. cit., p. [illegible].
[4] Hough: op. cit., p. [illegible].

The lamp-trimm ber mentioned several times above was in most cases merely 354
a pencil of wood va rying in length from 6 to 18 inches, generally flattened at 412
one end and smoot hed. Any small stick, whether of wood, bone, or antler,
sufficed in an emer gency; I have even seen a man use his knife. The stone
(soapstone or asbest os) pencils, often employed in West Greenland and in Hudson
Bay,[1] seem to have been unknown to the Copper Eskimo. Unknown, too, were
the drip-stands of A laska, Greenland, and other places. The Coronation Gulf [135]
soapstone is not por ous as the Greenland soapstone is said to be[2]; and though
oil might frequently drip over the edges, it never seeped through the vessel itself.

Every househol d employed torches for lighting extra lamps, for searching 416
the corners of the hu t, and particularly for conveying fire from one snow-hut to
another. Occasional ly a woman used the lamp-stick or even raw lamp-wick, but [824]
she always kept for the purpose four or five bunches of matted moss roots that
she had collected an d dried in the late summer (Figure 47b). Such a torch,
dipped in the melte d blubber, would burn several minutes, though if carried
outside in windy we ather it had to be shielded inside a bag or bucket. It was
a common sight afte r a day's march to see the women carrying torches from one
hut to another in o rder to relight their lamps; the first lamp, of course, was
lighted with pyrites.

In summer, whe n the lamp was discarded, the Eskimo carefully extinguished 372
their open-air fires with flat stones in order to reduce the burning wood to
charcoal, which rea dily took a spark on some future occasion and could be
kindled into a flame with the breath. In blowing the fire they did not purse
their lips as we do, but curled the tongue along the lower palate into a half-
cylinder that directe d the breath along a narrow path. When carrying glowing [824]
coals from one tent o r cooking place to another the women usually wrapped them [137]
in bunches of dry h eather or *Dryas integrifolia;* where no coals were available
they used the heathe r or dryas alone.

POTS

The Back River Eskimo commonly made their cooking pot from five flat 415
slabs of limestone ce mented together.[3] Among the Copper Eskimo we saw none [171]
of this type, only po ts carved from solid slabs of soapstone. Theoretically these [324]
pots should have rec eived two forms, one adapted for cooking over the blubber
lamp in winter and t he other for use over an open fire during the summer months.
The pot for use with the blubber lamp should have been a long, oblong vessel, [252]
rather narrow, becau se the flame of the lamp was a long, narrow line; it should [493]
have been comparat ively deep to hold large pieces of seal and caribou meat;
and it might have h ad considerable dimensions and weight, as it was always
carried on the sled d uring the winter and spring months. The pot for use over [482]
an open fire in sum mer should have been less narrow, and altogether smaller
and lighter, because at that season all the household furniture had to be carried
on the back.

In actual fact b oth types existed among the Copper Eskimo, but the longer,
narrower form adap ted for use over the blubber lamp was far more generally
used, as winter cond itions prevailed during 8 months of the year. The pot was
nearly always recta ngular in outline, though one saw occasional specimens of
trapezoid form. The corners were sharp, almost at right angles, the sides slightly
convex in outline a nd sloping inward towards the bottom, making the vessel
widest and longest at the top; the convexity in the sides was occasionally marked.
In large pots there was a tendency for the depth to vary inversely with the
breadth, so that the narrower vessels were likewise the deepest.

[1] Forsild, M.: Op. cit., p. [illegible]
[2] Birket-Smith, K.: Ethnography of Egedesminde District; Meddelelser om Grønland, vol. LXVI, p. [illegible] (Copenhagen, 1928).
[3] Chief Factor James Anderson's Back River Journal of 1930; Can. Field-Nat., vol. LV, 2, 1941, p. [illegible]

415 324 At each of the four upper corners a hole was drilled through the wall so that it issued about one-half inch below on the long side. The holes enabled the pot to be suspended by means of two loops of sealskin or plaited caribou sinew, one at each long end, from a horizontal rod; and the loops were adjusted to bring the bottom of the pot about one-half inch above the flame of the blubber lamp. In summer, when a pot was seldom or never suspended over an open fire, but rested on two or three stones, the loops were liable to hang down and be burned in the flames; accordingly, the housewife usually replaced them with two cords that ran diagonally between opposite corners, and allowed her also to raise the pot with one hand.

The wall of a pot often fractured at a corner hole, whereupon a second hole was drilled alongside the former one, in large vessels through the wall of the longer side, but in small ones occasionally through the end wall. Fractures in [414] the body of the pot were mended with short bands of beaten copper as we mend [381] china and porcelain, holes being drilled on each side of the fracture. The Copper Eskimo appeared to use no cement other than fat or grease to fill up the crack.

All pots, except the very smallest, had a low horizontal ridge carved across each short end about half-way down its outer face. Its original purpose, no doubt, was to facilitate the handling of the vessel, especially when mittens were worn, but in modern times it was largely ornamental, for it seldom projected more than about one-eighth inch and did not increase or decrease with the size of the vessel.

Pots varied in size from toys an inch or two long to vessels of 24 inches, capable of holding several quarts. An average vessel for use over a blubber lamp was about 18 inches long, 7 inches wide, and 4½ inches deep, with sides roughly ¼-inch thick. These were the dimensions at the top of the vessel; the bottom was about an inch shorter and half an inch narrower. Some of the larger pots in the possession of the National Museum of Canada have the following dimensions:

Catalogue number	Length	Breadth	Depth	Thickness
	Inches	Inches	Inches	Inches
IV.D.677	23½	7½	5	¼
IV.D.662	23	8½	4½	☆
IV.D.668	22½	6½	6	☆
IV.D.686	18½	8½	5	☆
IV.D.1563	19	9	4½	☆

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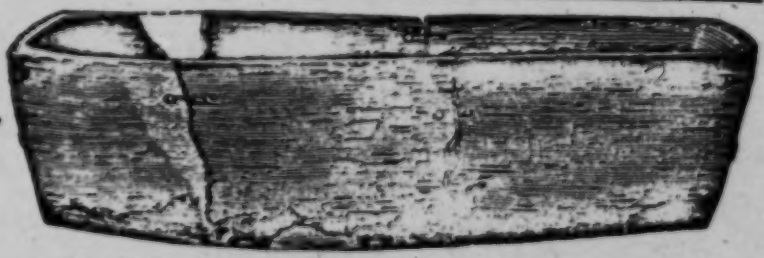

Figure 58. Soapstone pot repaired with copper bands. IV.D.1562. Approx. 1/3.

Three pots are shown in Figures 58-60. No. IV.D.1563 (Figure 58), obtained from a Prince Albert Sound or Minto Inlet native, is unusually

interesting, because it has been broken across in two places and repaired with six copper bands. Moreover, unlike all the other pots from this region in the possession of the museum, it is made from a biotite chlorite schist. Yet in shape it is almost a duplicate of No. IV.D.676 (Figure 59), the sides in both pots being unusually convex. The latter vessel came from Coppermine River, and is of the usual soapstone (talc chlorite schist) from the quarry near Tree River.

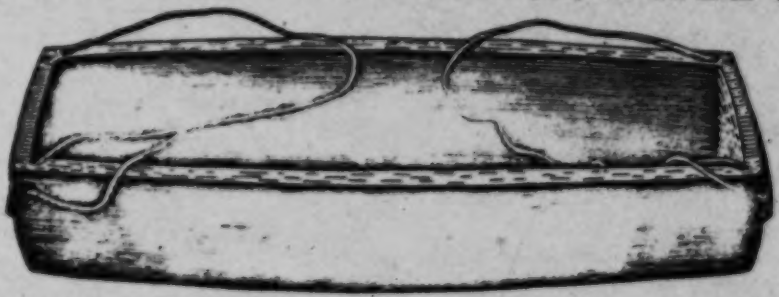

Figure 58. Typical soapstone pot. IV.D.676. Approx. 1/2.

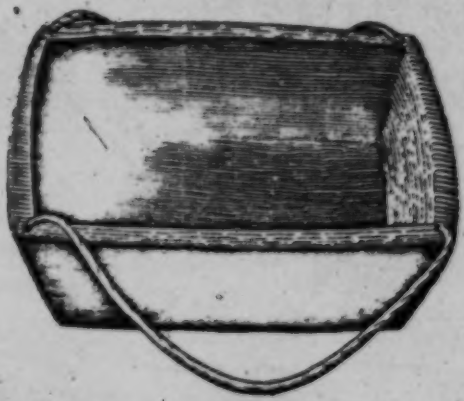

Figure 59. Squarish soapstone pot, now in Royal Ontario Museum, Toronto.

From an artistic point of view it would seem that the pots of the Copper Eskimo have degenerated during the last 150 years, for Hearne gives a slightly different description of the vessels he saw in the Eskimo encampment at Bloody Fall, near the mouth of Coppermine River. "Some of those kettles are so large as to be capable of containing five or six gallons; and though it is impossible these poor people can perform this arduous work with any other tools than harder stones, yet they are by far superior to any that I had ever seen in Hudson's Bay; every one of them being ornamented with neat mouldings round the rim, and some of the large ones with a kind of flute-work at each corner. In shape they were a long square, something wider at the top than bottom, like a knife-tray, and strong handles of the solid stone were left at each end to lift them up."[1]

[1] Hearne's Journey from Prince of Wales's Fort in Hudson's Bay to the Northern Ocean, edited by J. B. Tyrrell: The Champlain Society, Toronto, 1911, p. 198.

The flute-work in the corners and the strong handles of solid stone both disappeared, though the latter survived among the Caribou Eskimo.[1] In order perhaps to replace the handles, the neat ridges were lowered down the face of the short ends, and they were dropped entirely from the longer sides. With regard to the flute-work in each corner one may perhaps conjecture that it was a rounded projection pierced with a suspension hole, as in the pots of West Greenland,[2] to avoid drilling through the actual wall. So far as I know no specimen exists of the type of pot seen by Hearne.

TABLE

The table, having no legs, was practicable only in a snow-hut where one end could be supported by the snow wall.[3] As soon as the snow melted, therefore, it was cached with the lamp at some convenient spot on land and abandoned until the early winter. In shape, it was roughly rectangular, with one end often a little wider than the other; and in size, it ranged from 3½ to 4½ feet long by 10 to 15 inches wide. An average specimen is shown in Figure 61.

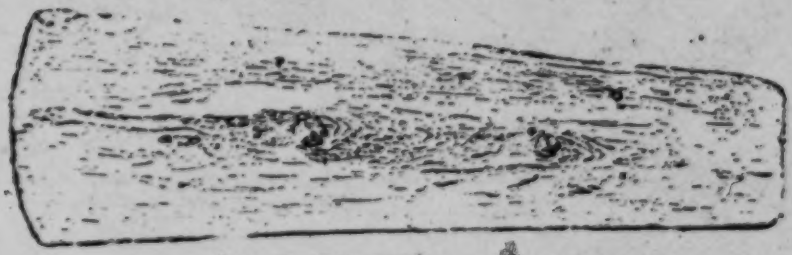

Figure 61. Table. IV.D.609. Approx. 1/12.

DRYING FRAME

The Copper Eskimo generally bestowed very little care on the making and handling of their drying frames, which, in consequence, were frequently broken and bent out of shape. Properly made specimens were never round, but roughly oval, the curve being flattened on the long side that fronted the sleeping platform. Occasionally the two ends of the wooden hoop were merely lashed together; more often they were pegged with bone or copper pins. The frame was further strengthened by cross bars of sticks that passed at intervals of a few inches from one long side to the other and were lashed to the under edge of the frame exactly as the cross bars of a sled were lashed to the runners. Newly made specimens, especially if large, had webbings of rawhide, but when the rawhide dried out and broke the owners often mended it with sinew. The thongs passed through holes (often sunken) in the frame, forming a warp and a weft that interlaced in what is known as cross-weft pattern, and gave square meshes from 2 to 4 inches across. A typical drying frame is shown in Figure 62. Simpson reported frames made of baleen on the south coast of Victoria Island near Wellington Bay,[4] but all that I observed were made of wood.

[1] Birket-Smith, K.: The Caribou Eskimos. pt. I, p. 143; Report of the Fifth Thule Expedition 1921-24, vol. V, Copenhagen, 1929.

[2] Thalbitzer, W.: Implements and Artefacts of the North-East Greenlanders; Meddelelser om Grønland, vol. XLIV, p. 468.

[3] For the method of supporting the table, lamp, cooking pot, and drying frame see Reports of the Canadian Arctic Expedition, vol. XII, pt. A, p. 61.

[4] Simpson, Thomas: Narrative of the Discoveries on the North Coast of America, London, 1843, p. 104.

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Greenland implement seems to have been made of antler, the heavy base at right angles to the prong forming the hammer head.[1] For Mackenzie delta and Alaska our information is less certain, but some bone-headed mallets figured by Murdoch,[2] were probably used for pounding blubber; they are mounted on wooden handles like the ordinary stone-headed mallet from this region. The Museum possesses a stone mallet (IX.F.323), unmounted, from Barrow that was said to have been used for pounding blubber.

The blubber pounder made of musk-ox horn is evidently a special product of the central regions, where alone, except for the uninhabited northern archipelago and North Greenland, the musk-ox has persisted down to the present day. The convenient shape and weight of the natural horn doubtless suggested its use for this purpose; and the grooving of the handle for the fingers was already practised with certain other tools, such as the marline-spike for the back-lashings of the bow.

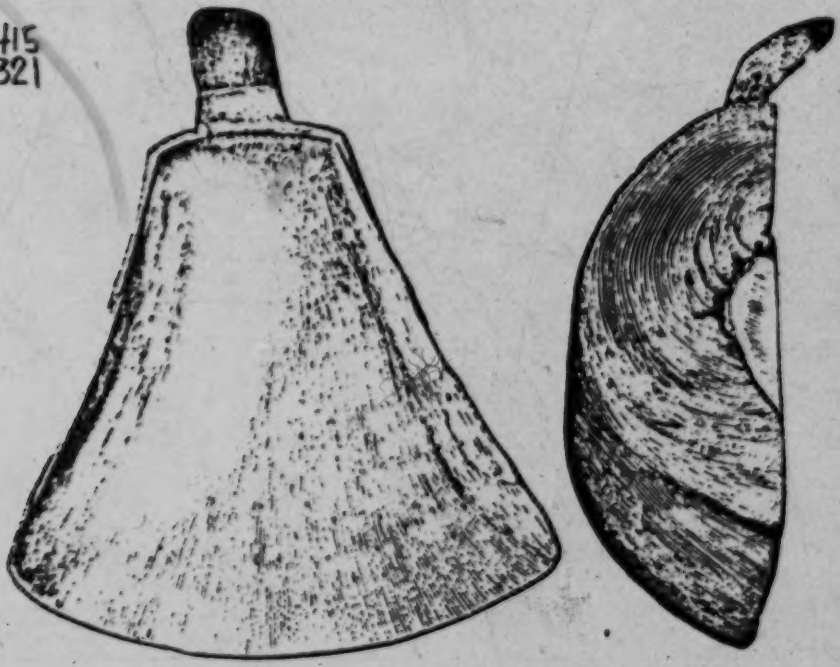

Figure 64. Drinking ladle, of musk-ox horn. IV.D.1488. Approx. 1/2.

LADLES AND DRINKING HORNS

Drinking ladles of musk-ox horn were indispensable to every household, but never carried by hunters in the field. Their usual shape is illustrated in Figure 64. In size they varied from children's toys 4 or 5 cm. long (often made of

[1] Birket-Smith, Kaj.: Ethnography of the Egedesminde District; Medd. om. Grøn., vol. LXVI, fig. 14.
[2] Murdoch, John: Ninth Annual Report of the Bureau of American Ethnology; Smith. Inst., pp. 97-98.

wood) (Figure 65) to large dippers 25 cm. long and 21 cm. wide at the outer rim. Another common type was long and narrow, almost rectangular, like the specimen shown in Figure 66; and between this type and the former there were gradations of every kind. Most specimens were slightly flattened on the bottom to prevent them from tipping over.

Figure 65. Toy wooden ladle. IV.D.139a. 1/1.

Figure 66. Narrow ladle of musk-ox horn. IV.D.168. 1/2.

Much less common than either of these two types was the drinking horn, where the small end was either cut off and plugged with bone or wood (Figure 67), or else curved back to provide a handle (Figure 68).

Figure 67. Drinking horn, of musk-ox horn. IV.D.1638. 2/3.

Nearly all ladles had the short handles slightly upturned. Often it was found easier to make this part separate, and to attach it to a short extension of the bowl with pegs of copper, bone, horn, or antler (Figure 69). Cracks and holes in the bowl, and broken edges, were patched in a similar manner (Figure 70).

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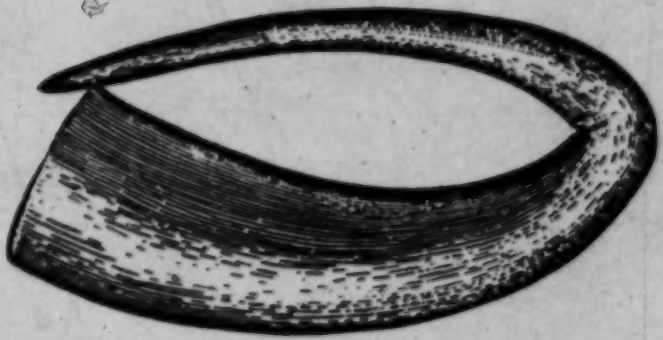

Figure 68. Drinking horn, of musk-ox horn. IV.D.1616. 2/3.

Figure 69. Ladle, of musk-ox horn, with jointed handle. IV.D.1618. 1/1.

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Figure 70. Repaired ladle. IV.D.444. 1/2.

WOODEN DISHES

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The wooden dishes for holding meat and blubber ranged in size from 5 or 6 inches to almost 2 feet. Some were round, with hollowed, saucer-like bottoms; they were made by curving a thin slat of spruce wood into a circle, joining the two ends with bone or copper rivets, and mortising in the bottom (Figure 71). Other dishes, made in exactly the same way, were oval instead of round (Figure 72). Besides these two forms there were oblong dishes with sloping sides, made by hollowing out a solid block of wood with the adze and the knife (Figure 73). I saw no baleen dishes such as are common in other parts of the Arctic.

Figure 71. Round dish, made from two pieces of wood. IV.D.617. 1/2.

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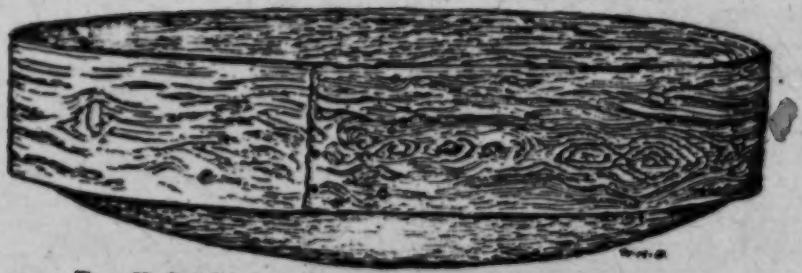

Figure 72. Oval dish, made from two pieces of wood. IV.D.625. Approx. 1/4.

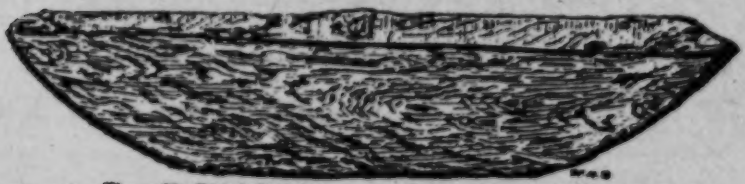

Figure 73. Dish hollowed from one piece of wood. IV.D.626. 1/4.

WATER BUCKETS

415 281 The bucket for carrying water (Figure 74) was made from tanned sealskin, and fitted with a strap handle of the same material. Its usual capacity was slightly over a gallon. The vessel lasted much longer than might have been expected, because holes and small rents could be quickly patched without impairing its tightness. As with our canvas buckets, ice that formed on the inside was broken loose by hammering on the outside with a stick.

415 [237] [484] [171] When travelling in winter, a few Eskimos carried on the back, under the clothing, a cylindrical water bottle (Figure 75) made from the gullet of a seal. The stopper was a wooden plug lashed inside the mouth of the bottle. Similar "thermos" bottles were known in the eastern Arctic also.

Figure 74. Water bucket, of sealskin. IV.D.618. 1/4.

MEAT FORKS

412 321 Meat forks, used for testing and removing the meat from the pot, but not for eating, were made of bone or musk-ox horn, more rarely of antler. Most were slender, tapering pencils, slightly curved, ranging in length from about 7

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to 12 inches. Often they were flattened at the broader upper end, whose edges were not infrequently serrated (Figure 78).

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Figure 78. Water bottle, made from the gullet of a seal. IV.D.391. 1/2.

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Figure 78. Bone meat forks. IV.D.501, 496. 1/2.

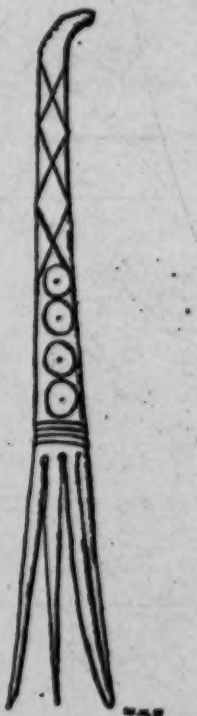

Figure 77. Meat fork, decorated. IV.D.1002. 1/2.

A very unusual meat fork obtained by Captain Bernard in Coronation Gulf is shown in Figure 77. It has four prongs, and the shaft is ornamented with incised crosses, parallel lines, and the ring-and-dot pattern. It might almost be mistaken for a peculiar kind of comb, but Captain Bernard stated that it was actually used as a fork.

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SNOW DUSTER

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The snow duster, used for beating the snow from the clothes immediately before or after entering the snow-hut (and also for driving out the dogs), was merely a stick 2 feet or less in length, slightly curved, and carefully smoothed so that it would not tear the clothes, but not ornamented in any way. A typical specimen is shown in Figure 80.

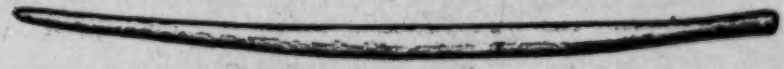

Figure 80. Snow duster. IV.D.1618. Approx. 1/3.

BAGS FOR CLOTHING

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The Eskimo kept their spare clothing in round or oval bags made of sealskin or caribou hide (Figure 81a). Caribou leg skins with the fur retained were preferred for the sides, and dressed sealskin for the bottom; but housewives used any material that lay to hand. Some of the round bags, which averaged about

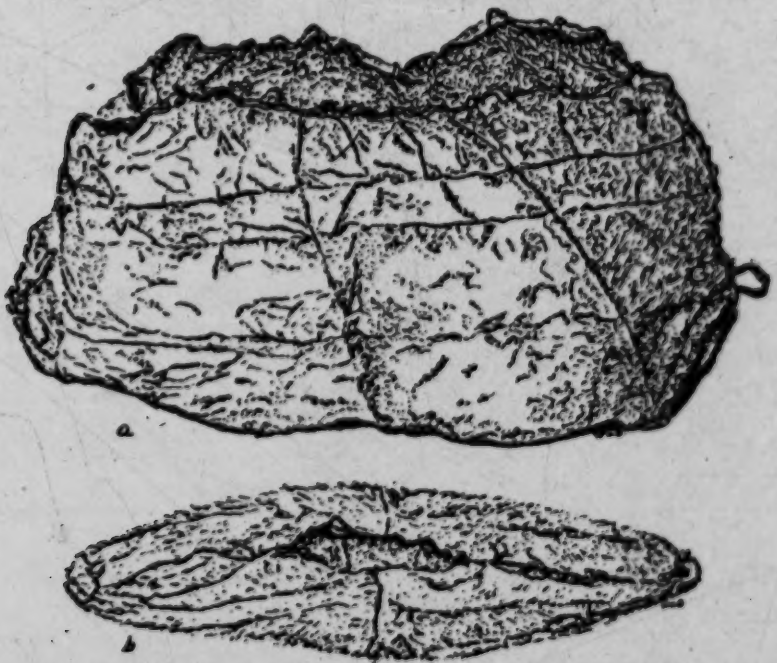

Figure 81. Bags for clothing. a: IV.D.66; b: IV.D.921. Approx. 1/3.

3 feet in diameter, laced across the top; others were tied with strips of skin extending from opposite sides, and fitted with strap handles of skin or plaited sinew to facilitate handling. The oval bag (Figure 81b) somewhat resembled

the men's tool bag, but was much larger and opened in the middle instead of at one end. Some women preferred this shape for storing the narrow white belly skins with which they decorated their garments, but it was far less common than the deeper rounded type.

In summer these bags of spare clothing were cached on top of high rocks out of reach of foxes. Rain occurred so rarely that their exposure to the weather brought little harm. In winter they were stored in a cupboard-like hole under the bed, or on the retaining wall outside the house.

BEDS

The willow mattress and bed skins have been described in Report of the Canadian Arctic Expedition, 1913-18, vol. XII, page 61. The sleeping bag was merely a long sack made from the heavy autumn skins of the caribou, unsewn or slit half-way down one side so that the occupant could crawl into it more easily. Husband and wife slept in one large bag; each child had a bag of its own.

lines, harpoon lines, and lashings of various kinds. No doubt the Copper Eskimo in emergencies made use of sinew from other sources, for the Mackenzie Delta natives sometimes use the sinew on the tail of the fox, which is about a foot long and said to be of excellent quality. 283

After the flesh had been carefully scraped away the sinew was allowed to dry a little; but as prolonged exposure to the heat of the sun rendered it stiff and brittle, it was generally stored away at once in a bag. The value of a slab of back sinew was fairly high everywhere along the Arctic coast.[1] Caribou were very abundant in the Copper Eskimo country until about 1919, but in the absence of linen or cotton thread—which in any case is less suitable for skin garments—sinew was in such great demand that it was constantly traded from one family or group to another. [435] [436] [437]

For ordinary sewing a thin strand was stripped off the slab with the teeth or thumb nail, drawn through the teeth to remove all roughness, and rolled against the cheek to twist it into a single smooth thread. Waterboots, however, called for a stouter three-ply thread, made by the women and girls in the house, where they fastened the ends of the threads to the drying rack, and caught the middle strand between the second and third fingers while they crossed the two outer ones with the thumbs and index fingers. Fishing lines of leg sinew were plaited similarly of three strands, but the harpoon lines, which required to be flat, had from four to eight strands, sometimes even more. Twisting, as with rope, was an unknown art.

Sewing Bags and Baskets. A Copper Eskimo woman without her needle and thread would have been as uncomfortable as a European housewife without her knitting. Sewing was no impediment to gossip: the woman sat on the sleeping skins, her legs doubled under her or stretched out in front, and plied her needle and her tongue at the same rate. Always she sewed from right to left; only a left-handed person sewed in the opposite direction. She held the thimble on the first finger (not on the middle, as we do), and pushed the needle through the skin with the side of the thimble, not with its top, if indeed it had a top. Then she caught the point between the thumb and middle finger, drew the needle out, turned it on its side, and with her thimble behind it pulled through the thread and reinserted the needle for the next stitch. Usually she did not tauten the thread until the second stitch. 294 462 [516] [521]

There was more sewing to be done at certain seasons than at others. Thus, in the autumn, all the new clothing for the winter had to be finished before the sun disappeared below the horizon for the long winter night. The women then sewed from early morning until late at night, with only brief respites to cook the meals or to pass the time of day with neighbours. A woman who had no children to sew for was, of course, less busy; the mother of a family was obliged not only to make the clothes for the whole household, but to train her girls to be dressmakers also. The latter began their training with odd scraps of skin, which they learned to join with neat close stitches. Later, they mended rents in their own clothing, and made dolls fully clothed from head to foot. Many men could make their own trousers and socks, and even sealskin shoes in an emergency; but only a very few could cut out a well-fitting coat or make a pair of waterboots that would really keep out the water. Even the women never attained great skill in these last-mentioned tasks until long after marriage, and a young wife often sought the assistance of an older relative or friend. [227] 294 462 828

The work-basket of most women was a bag of caribou or some other skin, or else, more rarely, a neatly worked basket of coiled willow twigs held in place with willow-bark stitching (Figures 91, 92). All the baskets that I saw were 415 285

[1] In 1916 the price of one slab of caribou back sinew at Barrow, Alaska, was $1.

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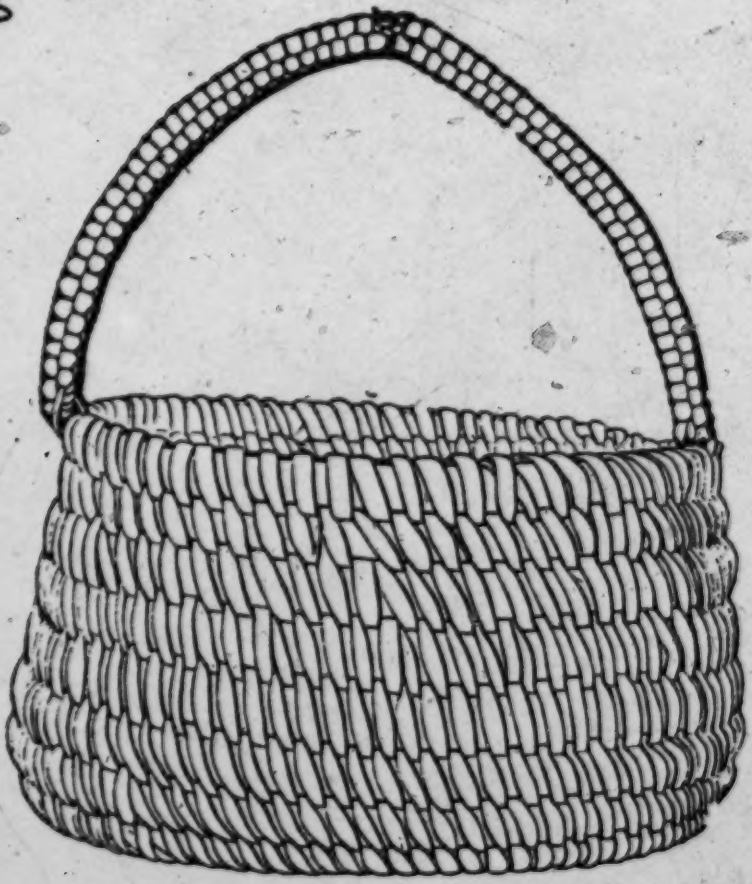

Figure 91. Sewing-basket, of willow twigs. IV.D.1318. 1/1.

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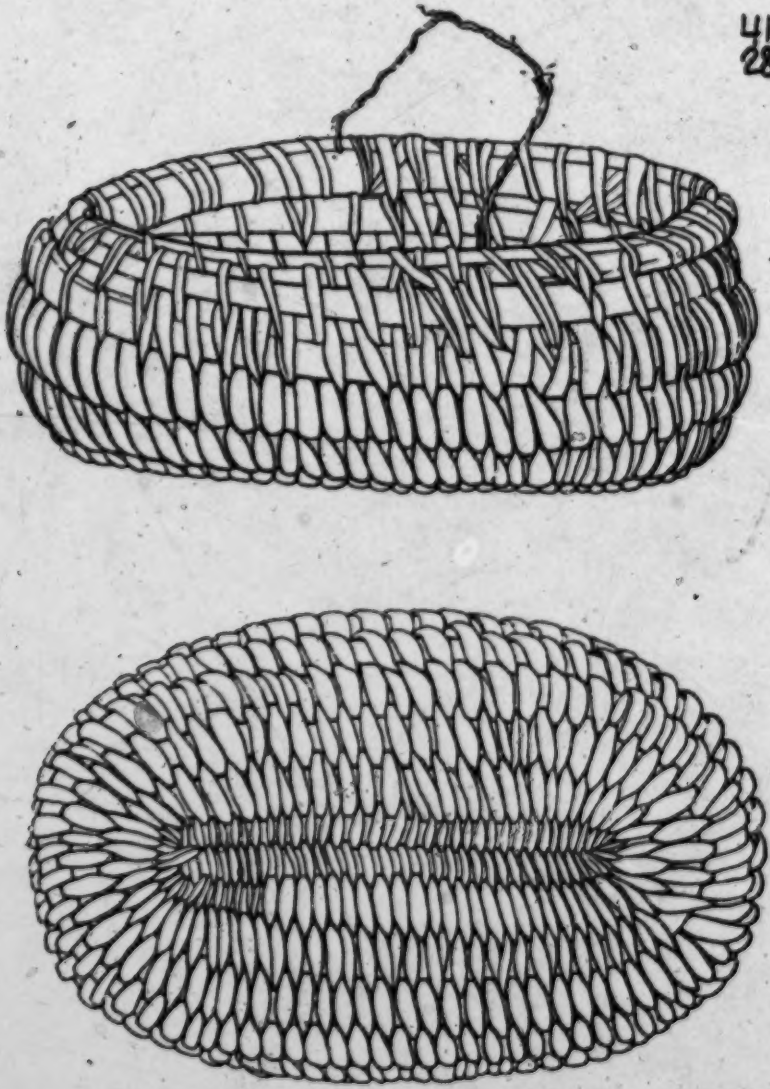

Figure 92. Sewing-basket, of willow twigs. IV.D.1318. 1/1.

415 very small, two of them, indeed, hardly more than an inch in diameter, serving no other purpose than to store one or two European needles. The larger baskets were sometimes provided with handles plaited square from four strands of the same willow bark.

415 412 Many women possessed no work-basket at all, but carried their sewing gear loose; when moving from place to place they merely stowed it inside a bag, a mitten, or even the household cooking pot. Their outfit was really very limited; it comprised only a needle-case, a thimble and its holder, a small knife for cutting the skins, a small cutting-out board perhaps, some sinew, and a few scraps of skin for patches. The knife has been discussed already on page 80.

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Figure 93. Needle-case and attachments. IV.D.341. 1/2.

321 415 *Needle-cases.* The ordinary needle-case was made from one of the leg bones of a caribou, usually the carpal bone, which was split, trimmed to the proper shape with a whittling knife, and ground down and smoothed with a pebble (Figures 93-97). Exposure to the weathering processes of the atmosphere

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gave these bones a dazzling whiteness, for which reason, in 1915, a young girl strung about a dozen unfinished needle-cases to a stick and left them to bleach throughout the whole summer. The final smoothness and polish came from handling.

Figure 94. Needle-cases and attachments. IV.D.484. 1633. 1/2.

Figure 95. Needle-case and attachments. IV.D.1632. 1/2.

Quite a number of needle-cases, however, were made, not from the leg bone of the caribou, but from the wing bone of a swan, goose, or other aquatic bird (Figure 98). They were much smaller and more rounded than the ordinary needle-case, which was usually flat on one side. These smaller needle-cases of wing bone were used mainly by hunters to repair their footgear or rents in their clothing at times when the women were absent. They were then attached to the bow-case, and often contained merely a needle of the usual type and a little sinew; instead of a thimble the hunter used his teeth, and his skinning knife took the place of the proper knife for cutting skins, the *qimalik*. [224] [192]

Most needle-cases were ornamented with incised lines very similar to the tattooed lines on women. This ornamentation will be discussed in a later section. [531]

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412 *Needles.* The Copper Eskimo seemed to have no recollection of bone sewing needles, but only of needles made from their native copper. They inserted them into a narrow strip of sealskin, or more rarely caribou skin, and drew them inside the needle-case for protection.

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Figure 96. Needle-case and attachments, front and side view. IV.D.181. 1/1.

Figure 97. Needle-case and attachments. IV.D.336. 1/1.

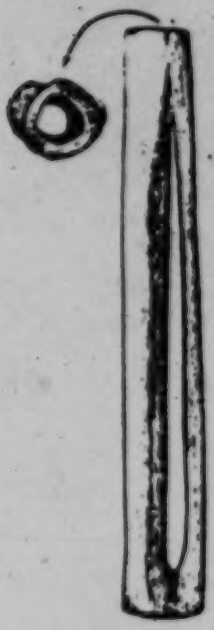

Figure 98. Hunter's needle-case, from bird bone. IV.D.387. 1/1.

325
412 Copper needles had practically disappeared when we visited the country, although a considerable number were made for sale. The few genuine specimens that I have seen were nearly square in section, from 2½ to 4 inches long, and with eyes drilled from both sides (Figure 99).[1] Iron needles, hammered out in the same manner as the copper ones, were still in common use, but as most of them were too large to enter the needle-case, they were kept by their owners in a separate strip of sealskin or in a bunch of matted moss roots.

412 *Thimbles.* There were two kinds of thimbles. One was simply a cap of sealskin to cover the tip of the finger (*See* Figure 93a); when not in use it was often attached by a short thread to the sealskin that contained the needles. The other and more usual kind was made from a small bone in the foot of the caribou, or sometimes from the horn of the musk-ox. In nearly all cases the upper end was open like a ring, because only the side of the thimble was used, not the top. One variety was equally broad all around, and had tiny holes pitted over all or part of the outer surface; another variety resembled a signet ring, except that the broad surface was worn in front, not behind, and that face

[281]
[321]

[1] The copper needles collected in Coronation Gulf by Hanbury in 1902, now in the British Museum, are square, as are also some iron needles that were collected by Rae in Repulse Bay 60 years earlier.

412 young girl. The specimens attached to the needle-case in Figure 93 are consider-
321 ably shorter than the average. The commonest type was perhaps that shown in
Figure 95, where it is also attached to its needle-case.

412 *Threading Needles.* Small bone needles were employed for threading a cord
321 through holes in skin, especially for fastening together the front of a tent above
281 the door. In form some of these needles were practically identical with many
pins used for closing the blood bag, though the latter were usually longer and
terminated in a greater variety of forms. Two threading needles are shown
in Figure 103.

412 *Scissors.* Probably as early as the middle of the nineteenth century the
177 idea of using scissors for cutting the hair of the head came to the Copper Eskimo
[439] from Hudson Bay natives, who acquired European scissors in trade with the Hudson's Bay Company and with whalers. Copper Eskimo specimens of fairly recent date had tin blades mounted with copper rivets on bone or antler. The best example I have seen is illustrated in Figure 104.

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[321]

Figure 102. Bone awl. IV.D.1772. 1/1.

[281] *Awls.* To punch holes in skin the Copper Eskimo used any pointed tool that was handy, e.g., the corner of the woman's knife, an arrowhead, a sealing skewer, or, occasionally, a mere splinter of bone. Specially made awls were extremely rare, but a bone one from Cambridge Bay is illustrated in Figure 105.

MEN'S TOOLS

415
412 Attached to the hunter's bow-case was a special tool bag to hold spare parts
[224] for the bow and arrows, meat skewers, and other implements connected with the chase. This bag naturally became the repository at times of other tools, such as the adze, that were not directly connected with hunting. However, most men

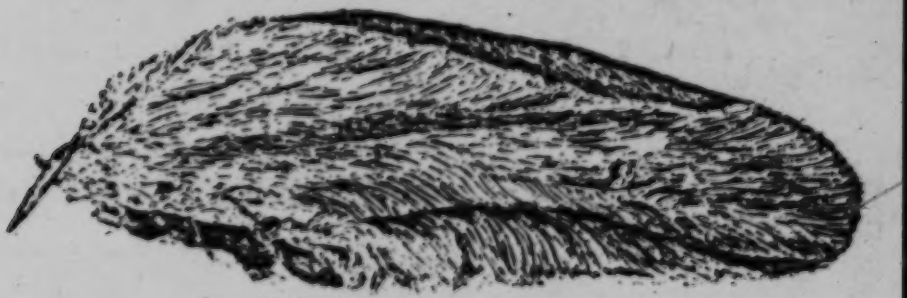

Figure 106. Man's tool bag of caribou fur. IV.D.728. 1/3.

owned a second small tool bag of caribou or other fur (Figure 106), and two or three had wooden boxes put together with iron or copper nails. Tools like the snow sounder and the ice chisel that were too long for any of these receptacles were generally stuck into the ground outside the tent, or into the wall of the snow-hut.

one needle, 8 inches long, the splinter was mounted in a wooden handle. The line was of sealskin, generally closed at the far end with a stick of bone, antler, or wood to prevent the fish from slipping off. 227 230 [283]

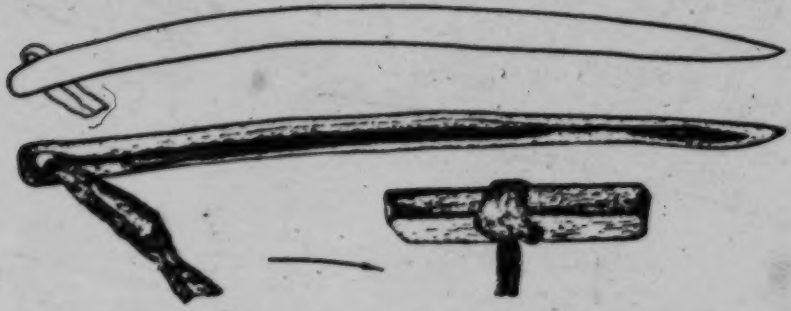

Figure 133. Bone needle for stringing fish. IV.D.481. Approx. 2/3.

Fish Bags. To pack their fish to camp the Eskimo used a bag of sealskin, commonly made by folding in the ends of a whole skin, doubling it over and tying a line to each end. The same bag, laced across, served as a dog-pack. 227 415 281 [492]

Fish Spears. Two varieties of fish spear were employed, the trident and the leister. The leister was preferred for spearing trout and salmon in lakes when they came to nibble at the lure, the trident for the migrating salmon that entered the weirs across streams; but generally a man used whichever weapon happened to be nearest at hand.

The shape of the leister is best seen from the illustration (Figure 134*a*). The handle was simply a long pole, split at the end to receive a barbed, occasionally barbless, point of antler, which was held in place with a lashing of sealskin, or more rarely of sinew. Two prongs facing each other, which sprang open on striking the fish, were invariably of copper or iron, copper, of course, being the original material; they were driven like nails into antler heads, which were bevelled off at the lower ends to fit corresponding ends on wooden extensions. Antler and wood were spliced with sealskin lashing, strengthened at times by bone or antler nails. The wooden extensions were then bevelled off in the same manner and lashed to the shaft, but not nailed, as low ridges at their tips prevented the lashings from slipping off. All these lashings quickly dried up from disuse, and the parts fell asunder except where they were held together by pegs. In a few leisters the side pieces were entirely of antler, not of antler and wood combined. 227 284 321 [325]

The trident (Figure 134*b*) resembled the leister, but had no prongs on the side pieces, which were made entirely of antler, pointed and barbed like the point in the middle. The number of barbs varied; in some cases they were directly opposite, in others staggered, both arrangements occurring at times on the same weapon. 227

Double-pointed spears were sometimes improvised for stabbing sculpins, or the small fish that hide under the stones on the margins of lakes. I have seen two sharpened pieces of bone, and even a European fork, lashed to the end of a walking-stick for this purpose. Naturally, they were dismantled again as soon as the need for them passed. [136] [177]

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Skewers for Seals. To hold his extra harpoon head, the sealer attached to the button on the back of his coat a small bag made from seal or caribou skin, or from the foot or neck of some waterfowl such as a loon or a swan. Around the outside of this bag he sewed a narrow band of skin into which he inserted three or four bone skewers for closing the wound in the seal, and one or more bone toggles with short loops for dragging it home (Figure 147). The skewers,

Figure 147. Bag for spare harpoon head, skewers, and toggles. IV.D.719. 1/2.

though knobbed at the end like the skewers used for caribou meat, usually had a slightly different shape; for the caribou skewers, which penetrated only the flesh of the animal, not its skin, were rounded down to the point, whereas the sealing skewers (Figure 148), which had to pass through the tough hide on both sides of the wound, were bevelled in such a way that they had at least two, and often four, cutting edges similar to those on a bone arrow head.

All sealers carried these bone skewers stuck in a strip of skin, but not all of them burdened themselves with a bag and a spare harpoon. Lacking the bag, they merely cut a hole in the strip of skin for slipping it over the coat button.

Toggle for Leading Dog. Figure 149 illustrates the usual toggle for leading a dog to the sealing ground. In principle it is the same as the toggle on the harness. The rigid parts are of bone, antler, or musk-ox horn; the cord and strap, of sealskin or caribou leg sinew. The broad loop hung over the sealer's wrist, and the small toggle buttoned into the loop at the end of the dog trace. There was no variation except in size, and no ornamentation.

Toggles for Hauling Seals. Toggles for hauling seals were indistinguishable from women's belt toggles (*See* page 50). Like most of the latter they were made of bone, antler, or musk-ox horn, nearly always the first, measured between 2½ and 4 inches from tip to tip, and had the shape of a crescent that tapered towards each end. Two ends of a short cord of sealskin, or more usually of plaited sinew, were passed through the hole and knotted to form a loop (Figure 150). The sealer threaded the toggle through a hole in the seal's mouth, passed it back through the loop and attached it to the trace of his dog, which then dragged the carcass home.

Sealing toggles, like other bone implements, were often ornamented with incised lines. These will be discussed in another place.

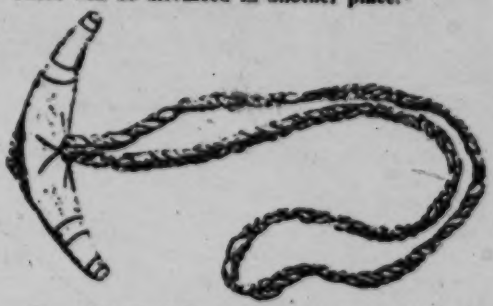

Figure 150. Toggle for hauling seals. IV.D.197. 1/2.

LAND HUNTING EQUIPMENT

Bows and Arrows

Most bows were made from three pieces of spruce wood, a middle piece and two "horns," joined together with the usual "cleft" or V splice (Figure 151b). Bows made from a single piece of wood were comparatively rare (Figure 151a), though one, owned by a 6-foot Tree River native, was stronger than any of the three-piece weapons. From the eastern end of Coronation Gulf came a few bows built up from musk-ox horn, caribou antler, or both materials combined (Figure 152), indicating a dearth of suitable wood in that region. In one of them, two pieces of musk-ox horn have been joined wth a cleft splice, but elsewhere in this bow, and in all other bows of horn or antler, the makers have used the less difficult scarfed splice, and strengthened it in places with copper or iron rivets. A few wooden bows have scarfed joints also, but they are mostly small weapons for women and children.

Because dry spruce has little tensility and easily fractures, every bow was strengthened with a score or more strands of braided sinew[1] that extended along the whole back and passed around the nocks (Figure 151). Some hunters

[1] One bow, a small one for a woman or child, has thongs of rawhide, presumably from want of sinew.

411 scarfed and spliced together with three copper rivets (Figure 156). Both were
324 deeply encrusted with lichens, and were evidently of considerable antiquity.
321 Probably they were made by ancestors of the present-day Copper Eskimo. On
172 the other hand, it is not at all impossible that they are arrow heads of the earlier "Thule"-culture inhabitants who have left other remains in the region. The use of copper rivets does not rule out this possibility, because copper-bladed women's knives with typical "Thule" handles have been recovered from an old stone house on Victoria Island and from a stone grave on the neighbouring Read Island, along with harpoon heads and other objects of typical Thule (North Alaskan) types. There are good grounds for believing, therefore, that
[325] the ancient Thule population itself used the local deposits of copper and passed
[174] on its knowledge to the ancestors of the present-day Copper Eskimo when the latter migrated into the area.[1]

411 In 1914 arrows with long antler points that fitted directly into the wooden
321 shafts were fairly common; some had no barbs, others one or more along one
325 side. Much more common, however, were arrows with separate blades of bone, copper, or iron that riveted into antler foreshafts, or were provided with long shanks that took the place of foreshafts. Points of bone were rare; about 65 per cent were of copper and the remainder of iron, hammered into the same shapes as the copper ones. These shapes, and also the methods of splicing the wooden shafts when made of two or more pieces, have been rather fully illustrated by Stefansson.[2] Individuals may have preferred one type of point to another for certain game, but so far as I could discover they used all types more or less indiscriminately.

411 The Copper Eskimo used the Mediterranean release, holding the bow
237 almost horizontal. They generally feathered their arrows with goose, loon, eider duck, or snowy owl quills, but did not disdain quills from other birds. Normally, two feathers only were used on each arrow, but occasionally three, for no special reason that I could discover. The hunter cut off on his trimming board all the barbs along one side of the feather, smoothed the rough quill with his knife, grooved the arrow shaft with the special tool for that purpose (or, if he lacked this tool, split it slightly with his knife), and lashed the two ends of the feather in the grooves with caribou sinew. This was the usual way of feathering. Occasionally, however, he merely trimmed the barbs a little on both sides and fastened the feather flat against the shaft. There was also a third method, in which two half feathers, i.e., feathers from which the barbs on one side had been removed, were lashed around the end of the shaft spirally, end to end, and the barbs spread fanwise. I saw a man feather an arrow for his young stepson in this way and was told that it was a rare method, never employed on arrows intended for serious use.

Bow-case, Quiver, and Tool Bag

411 The bow-case (Figure 157), which was made of sealskin to keep out water,
415 was shaped to the form of the weapon; one end was closed, the other left open
281 for some distance down its curved edge to permit the insertion of the bow. To close the opening when the bow was in place there was a short cord of plaited sinew whose loose end was tucked under the lashing, leaving the tip protruding so that it could be unfastened at a single jerk. A quiver with or without a cap was sewn or buttoned to the straight edge of the case; and a tool bag was also sewn to the case in such a way that the quiver, when carried on the back, lay on top of it and prevented its contents from falling out. Often, too, there was a sheath

[TEXT CONTINUED ON PAGE 128]

[1] Matthiesen found a little copper in the old Thule site at Nanook, on the west coast of Hudson Bay (Reports of the Fifth Thule Expedition, vol. IV, pt. 1, pp. 14, 18 (Copenhagen, 1927)); and Cochrane Rowley discovered a small copper hook in a Dorset culture site near Igloolik, some 500 miles further north. So far as we know today, this copper could have come only from the Coronation Gulf region.

[2] Stefansson, V.: Arch. Papers, Am. Mus. Nat. Hist., vol. XIV, pp. 39-40 (1919).

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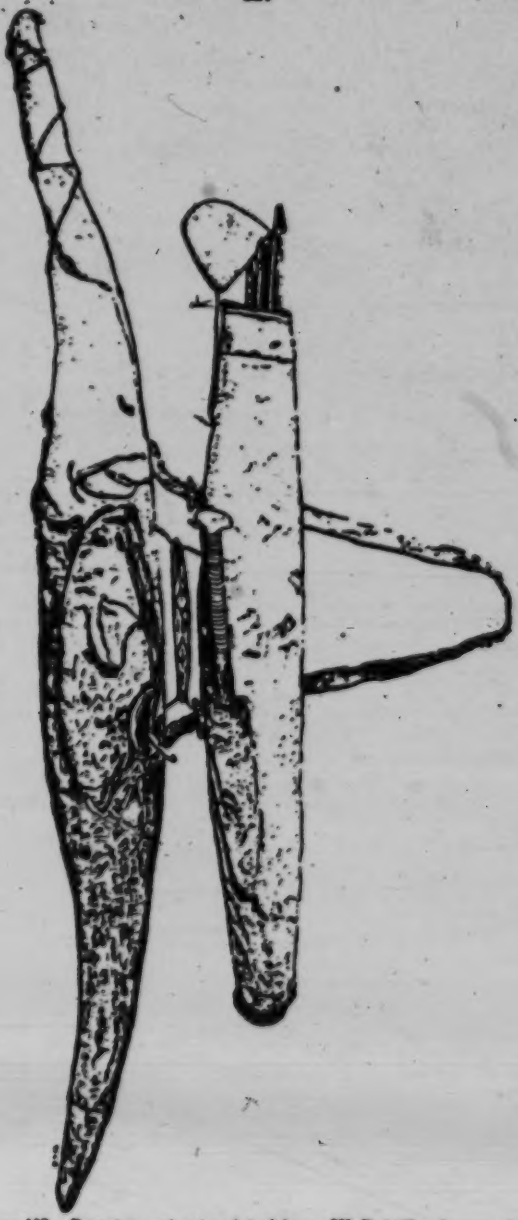

Figure 127. Bow-case, quiver, and tool bag. IV.D.1697. Approx. 1/12.

411 for the snow knife, which served also as a hunting knife, sewn to either bow-
415 case or quiver. The carrying strap was attached by sewing or with toggles to
28 the same edge of the bow-case as the quiver, so that the two would lie together; in fact, the ends of the strap often served to unite them.

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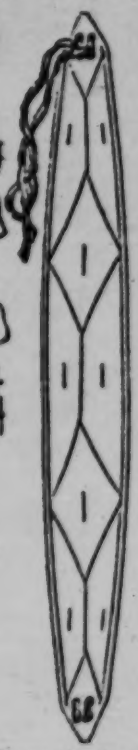

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[192]
[531]
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Bow-case, quiver, and tool bag, when fully equipped, carried on their surfaces nearly a dozen bone toggles and needles whose forms and uses require some explanation. Other objects might be attached for temporary convenience, but they were not standard equipment.

When the carrying strap, which passed across the chest and around the upper arms like the regular pack-strap, was not sewn directly to the bow-case, it buttoned to two toggles of the standardized shape, illustrated in Figure 160*a*. There was also a long, flat handle, *nerumiarvik*, lashed to the straight edge of the bow-case so that it could be carried in the hand. This handle varied in size according to the size and weight of the bow and quiver, its average length being about 8 inches; the shape never varied, however, except that the ends were sometimes pointed instead of rounded. The flat surface lent itself to ornamentation, and most bow-case handles were decorated with a more or less fixed design[1] (Figure 158).

A toggle similar to those for the carrying strap was occasionally sewn on the side of the bow-case for the attachment of a short board. I failed to procure any specimen of this board, but Figure 159 reproduces field sketches of two that I saw in actual use. Each was about 16 inches long, but one was made from one solid piece of wood, the other from two smaller boards lashed together. The toggle on the bow-case passed through the slot in the middle. In the hunting field the Eskimo planted two walking-sticks in the ground, fastened these boards to their ends, and stationed two children to twirl them, or to beat them with a stick, so that the frightened caribou would not break away from the line of the drive and escape the concealed hunters.[2] The board had two names, *kiryalun* and *aulaqotit*, "driving instrument".

[192] → Figure 158. Bone handle of bow-case. IV. D. 199. 1/2.

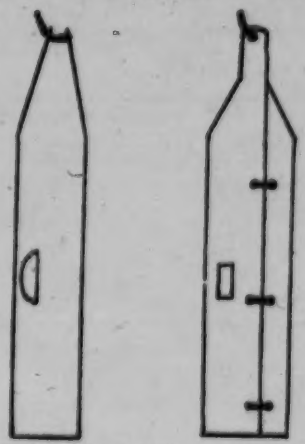

Figure 159. Field sketch of two boards used for frightening caribou. Approx. 1/6.

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The quiver was sometimes sewn to the bow-case, sometimes attached by means of small toggles of varying shapes, one type being shown in Figure 160*b*. A similar toggle on the face of the bow-case buttoned over the handle of the snow knife to keep it from slipping out of its sheath.

[192] Somewhere on the outside of either quiver or bow-case were two small bone "wings", from 2 inches to 3 inches long, of standardized shape, for pinning through the wings of

[113]

[1] The specimen figured in Stefansson, Anthropological Papers, Amer. Mus. Nat. Hist., vol. XIV, pt. 1, p. 80, called a "pull for Cord used in hauling Seals", is a bow-case handle.
[2] See Report of the Canadian Arctic Expedition, vol. XII, pt. A, fig. 60, p. 131.

small birds, principally ptarmigan; hence these toggles were called *aqargiqsiutit:* "ptarmigan appliances" (Figure 161).

A bone or musk-ox horn handle (*nerumiutaq*), fitted with a short strap of plaited sinew (Figure 162), was sometimes kept in the tool bag, but more often looped through some hole on the outside of the quiver or bow-case, or attached in some other way. Usually about 10 cm. long, of standardised shape, it was often grooved to fit the fingers in the same way as the blubber pounder and the whittling knife. This handle served on occasion to carry any small bundle, but was principally used for carrying the head of the caribou, or the bag containing its blood. From the latter use it acquired a second name, *auqtun* or "blood carrier".

Figure 160. Toggles sewn to bow-case, *a* for attaching the carrying strap, *b* for attaching the quiver. IV.D.1033, 91. 1/1.

The tool bag was often closed by lacing, for which purpose one end of a short cord of sinew was attached to the edge of the bag, and the other end to a small bone needle with which it could be threaded through the holes. When completely furnished, it contained the following articles.

Two marline-spikes for the bow lashings; two twisters for the bow lashings; one or more spare wedges to go under the lashings; feathers for the arrows, kept usually in a small bag of marmot or other skin; a small board for trimming the feathers; a grooving tool for attaching the feathers; a little caribou back sinew for lashing the feathers, splicing the arrows, sewing rents in clothing, etc.; spare parts of arrows for repairs; bone skewers for the carcasses of game; bone pips for the bag that contained the caribou blood; a wrist guard; a drinking tube; a needle-case and needle; a mattock for making a hunting pit (if too large for the tool bag this was carried in the quiver or even in the bow-case); an arrow straightener.

Very few tool bags, however, contained all these articles. The natives nearly always hunted together, and the deficiencies of one bag could be supplied from another. On the other hand, the tool bag often contained other articles, such as the whittling knife and the graver for cutting bone, which were more usually stored in a special tool bag at home, with the adze and the bow-drill. The bow adjuster, being large and cumbersome, was also left in camp.

Marline-spikes. Marline-spikes (Figure 163), which averaged from 6 inches to 10 inches long, were made of caribou or musk-ox bone. Some closely resembled marrow spatulæ and, at times, were actually used for extracting marrow, but their larger size, heavier construction, and the small hole below the handle instead of at the extreme end distinguished them from the ordinary spatulæ. This hole enabled them to be lashed in pairs, because two were required to unfasten and tighten the back lashings of the bow. One cord often fastened together the two marline-spikes and the two twisters, which also went in pairs. The handles of marline-spikes were frequently grooved for the fingers on one edge, and sometimes on both. Ornamentation, however, was rare, and when it did occur, consisted merely of a few incised lines or the ring-and-dot pattern.

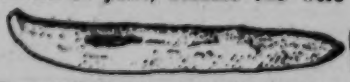

Figure 161. Bone toggle attached to either bow-case or quiver for pinning through ptarmigan wings. IV.D.1029. 1/1.

Twisters. The twisters (Figure 164) were much shorter than the marline-spikes to which they were usually attached, although they were made of the same material, and also used in pairs. All had the same unvarying shape, a flattened

[TEXT CONTINUED ON PAGE 131]

412 414 321 about 6 inches long that tapered to rather blunt points, and had rounded or conical knobs at their heads so that they could be fastened together in pairs, either tied with sinew or, more often, pushed through holes in a small strip of sealskin. If knobs were lacking, small holes were drilled for tying them together (Figure 167).

412 414 32 224 [415] *Bone Pins* (for the blood bag). The hunter generally collected the blood of the caribou in the reticulum of the stomach, which is shaped like a pouch. To close this pouch he carried in his tool bag two or three thin round pins of bone, rarely of wood, that ranged in length from 2½ inches to nearly a foot. The points were usually rather sharp so that they would penetrate the reticulum without tearing a large hole; and the heads were shaped in various ways, so that many blood pins were indistinguishable from the needles used to lace together the front of a tent (Figure 168). Some were quite plain, others had small knobs or were bevelled off like a marrow spatula; but a favourite form had two or even three projecting points, which were useful for keeping the mouth of the bag open when pouring the blood into it. Many hunters fastened their pins in pairs, like the meat skewers, the twisters, and the marline-spikes. A man who had no pins, tied inside the mouth of the blood bag a wooden plug such as is shown in Figure 169.

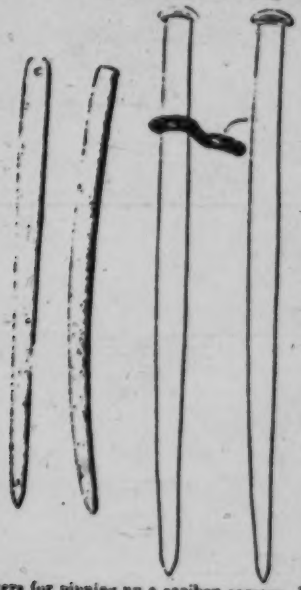

Figure 167. Bone skewers for pinning up a caribou carcass. IV.D.490, 1338. 1/2.

411 [531] [971] *Wrist Guard.* Archer's wrist guards (Figure 170) seemed to be universally of bone, and never to vary from an oval outline. The fine carving and engraving that appears on wrist guards east and west of this area was unknown to the Copper Eskimo, where one specimen was typical of all.

415 237 *Drinking Tube.* The drinking tube, though normally carried by the hunter only, was used by his entire family when travelling overland in summer with all its possessions. It was simply the hollow leg bone of some bird, usually a swan, not ornamented or marked by any special features. Many were indistinguishable from the needle-cases often found in the same tool bag (Figure 171).

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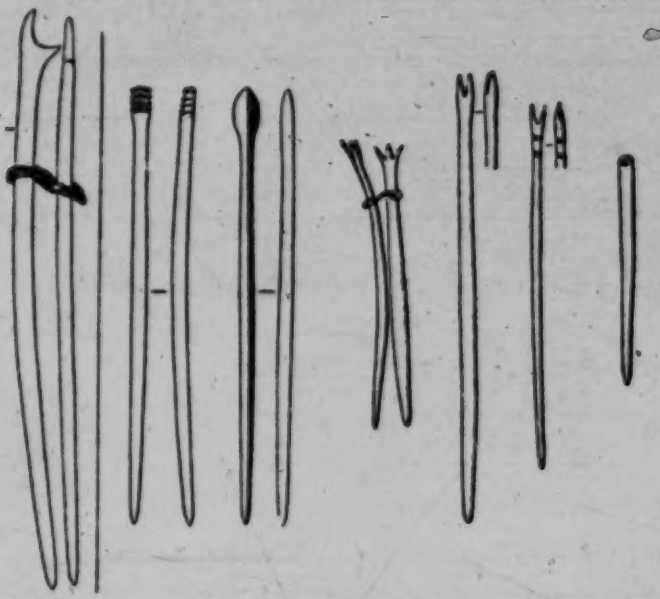

Figure 168. Bone pins for fastening the blood bag. IV.D.1648, 830, 221, 222, 1343, 1317, 498. 1/2.

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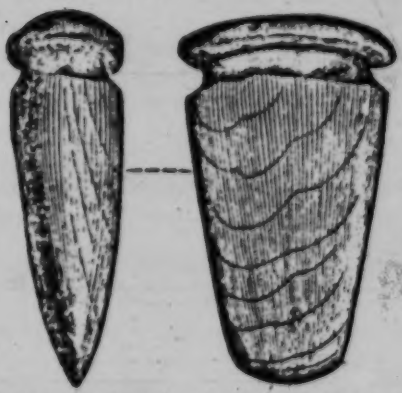

Figure 169. Wooden plug for closing the blood bag in the absence of a skewer. IV.D.1651. 5/4.

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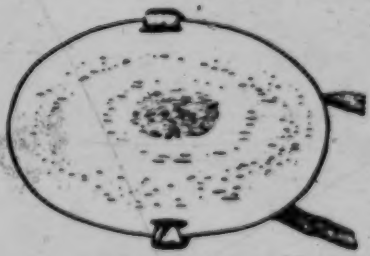

Figure 170. Archer's bone wrist guard. IV.D.386. 1/1.

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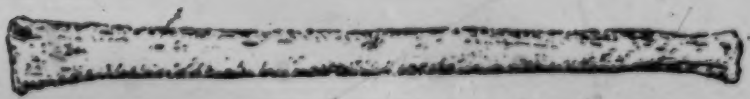

Figure 171. Bone drinking tube. IV.D.894. 1/1.

29: Jenness E-5 (1914-1916) 1959
ND8 Copper Eskimo ND8

123 We lingered a few minutes only, but I visited him again in the evening, when he had the stage all set for [272] my reception. The hut was thronged with hunters sipping oily tea from two small china cups. Over the [415] blubber-lamp hung an iron cauldron from which Knife dipped up the evil-looking beverage with a greasy 123 ladle of musk-ox horn. Some of his treasures lay 177 beside him, dragged out of bags and boxes for my edification. There were two rifles, a Hollis double-barrelled fowling-piece, a pipe, plug tobacco, and part of an American magazine; strangest of all, a Roman breviary and an illustrated French Scripture book.

177 How, and where, had he obtained these last? Hanbury, the English explorer who passed through this country twelve years before, had certainly not carried them on his sled. Captain Bernard might have brought some of them on his vessel when he wintered in 1910 near the mouth of the Coppermine River; but surely he had no Roman breviary or French Scripture book? How did they come into the possession of the Eskimos?

797 I questioned Knife. The previous summer, he said, 177 he and his kinsmen had traded with three white men near Great Bear Lake. One of the white men, who wore a robe and a crucifix, was especially friendly, and when Knife and his companions secured him a supply of fresh meat, rewarded them with many presents, among them the rifles and the books.

29: Jenness E-5 (1914-1916) 1959
ND8 Copper Eskimo ND8

solitary vigil, it certainly left no traces in her appearance or mode of greeting. Her people, unlike other Eskimo tribes, never voluntarily abandoned the aged and infirm to die of cold and starvation, but prolonged their closing years with loving care. Parents and children were united by tender bonds that neither time nor distance dissolved. I once witnessed the chance meeting of an old woman with her middle-aged son who had been living in a remote tribe for many years; the stalwart hunter knelt in the snow at her feet, and, as she raised her jacket, reverently touched with his lips the breast that had nourished him in childhood.

A little north of our camp, Bad Creek cut through an outcrop of dolomite, forming a narrow S-shaped cañon a quarter of a mile long and forty feet deep. The locality was very familiar to my companions. From a ledge just under the brow of the cliff we dropped our hooks into a deep pool, and in a few hours hauled out seven large trout. (Whether any trout remained in the pool all winter, or whether they ascended to a lake before the freeze-up, I do not know; above and below there was less than three feet of water in the stream, which would freeze to the bottom before Christmas.) A gravel beach at the outlet of the cañon contained numerous pebbles of iron pyrites, used by the natives for striking fire; and a neighbouring meadow was white with the seeds of the cotton-grass that supplied both tinder and wicks for the lamps. The

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222 415 [137] women and children gathered large quantities of these seeds, stuffing them into small bags of the strangest varieties and materials. Some were worn-out stockings of squirrel or caribou fur; two were made from the membranes that had lined the hearts of our polar bears; but the most curious of all were bottle-shaped pouches sewn from the webbed feet of red-throated loons. Whatever their shape, all alike found their way into the dog-packs, where they added one more item to our varied impedimenta.

484 Our loads had increased considerably since those early days in August when, leaving the hills, we had [231] commenced this ceaseless quest of caribou. Icehouse, it is true, had no longer two small puppies tearing at the back of her hair while ostensibly nestling in the hood of her jacket; they were sturdy urchins now, able to keep pace with the other dogs and to steal the meat [251] from our packs. But in addition to her usual burden [482] she carried fifteen pounds of tallow, her share of the caribou back fat that the women had boiled down for [482] ease of transport. Each man had several green caribou hides rolled round his pack, and Ikpuck and The Runner bore the two bear skins, which alone weighed [126] upward of fifty pounds. My own pack was unchanged save for two extra caribou hides, and an increase in the thickness of my herbarium from two inches to six.

775 Late one afternoon, as we skirted the edge of a lake, we came to an old camping-site where a woman's knife,